

Work Order ID 131660

Tuesday, April 21, 2015 9:03:39 AM

131660

Page 1

Item ID: D3796-043 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Wearplate Weldment
Start Date: 4/21/2015 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 5/1/2015 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: WVF Date: 15-4-21 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3796	B

100

0.00

100

FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3796 Dwg Rev: B304.063Prog Rev: B

2-Deburr if necessary

2 0 Im 15-4-21

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

2 0 Im 15-4-21

Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

Date: _____

Work Order update only ☐

Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																															
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 131660

Tuesday, April 21, 2015 9:03:39 AM

131660

Page 3

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Revision ID: Stop ***NS2***
Item Name: Aft Wearplate Weldment
Start Date: 4/21/2015 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 5/1/2015 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC5- Inspect part completeness to step on W/O	0.00							
150									
QC	Memo	0.00							
Quality Control									
160	Identify as per dwg & Stock Location: <i>PPP 131658</i>	0.00							
160									
Packaging	Memo	0.00							
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
170									
QC	Memo	0.00							
Quality Control									

APR 28 2015

APR 29 2015

APR 29 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By 	
								Lead hand / Supervisor Approval Verification 	
								QC / QA Coordinator Approval 	

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
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Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____ _____ _____					
Misidentified ☐	☐ Past Due						

Picklist Print

Tuesday, April 21, 2015 9:03:38 AM

Page 1

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131660

Parent Item: D3796-043

D3796-043

Parent Item Name: Aft Wearplate Weldment

Start Date: 4/21/2015

Required Date: 5/1/2015

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 08-08-05 new issue DD verified by:ec
 IPP Rev:B 08-09-10 revA as per dwg (ecn 08-513) DD VERF:EC IPP REV:C
 AS PER PB1 12-07-04 JLM VERIOFIED BY:DD IPP REV:D
 12.09.06 PER DWG REV.B DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA		Purchased	No			100	sf	381.9176	1.912	5			
M304S16GA									**			Jm15-4-21	
304/316 Sheet .063													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				MAT019				381.9176					
				m131384				154.9176					
				m131503				227		131503			
D4379-3		Manufactured	No			130	Each	41.0000	12	24			
D4379-3									**			15-04-22	
Wearplate Cup												JBL	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA002 131661				41		16			
				119018				1					
				130221				40		18			

DQA: _____ Date: _____



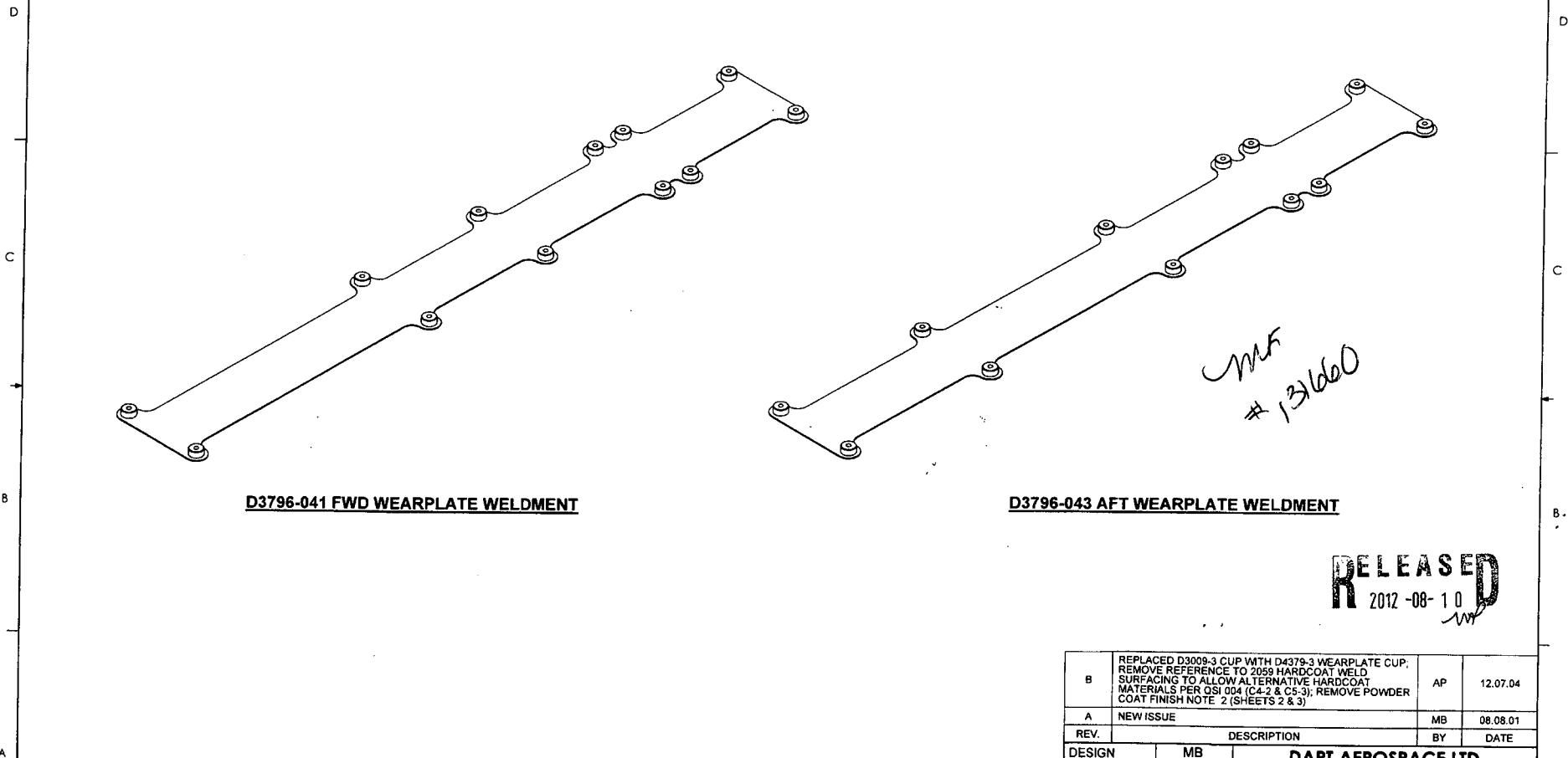
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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8 7 6 5 4 3 2 1



D3796-041 FWD WEARPLATE WELDMENT

D3796-043 AFT WEARPLATE WELDMENT

MF
#131660

RELEASED
2012-08-10
W

B		REPLACED D3009-3 CUP WITH D4379-3 WEARPLATE CUP, REMOVE REFERENCE TO 2059 HARDCOAT WELD SURFACING TO ALLOW ALTERNATIVE HARDCOAT MATERIALS PER QSI 004 (C4-2 & C5-3); REMOVE POWDER COAT FINISH NOTE 2 (SHEETS 2 & 3)	AP	12.07.04
A		NEW ISSUE	MB	08.08.01
REV.	DESCRIPTION		BY	DATE
DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	AP			
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B	
MFG. APPR.	<i>[Signature]</i>	D3796	SHEET 1 OF 4	
APPROVED	<i>[Signature]</i>	TITLE	SCALE	
DE APPR.	<i>[Signature]</i>	412 SKI WEARPLATE	NTS	
DATE		12.07.04	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

DQA: _____ Date: _____



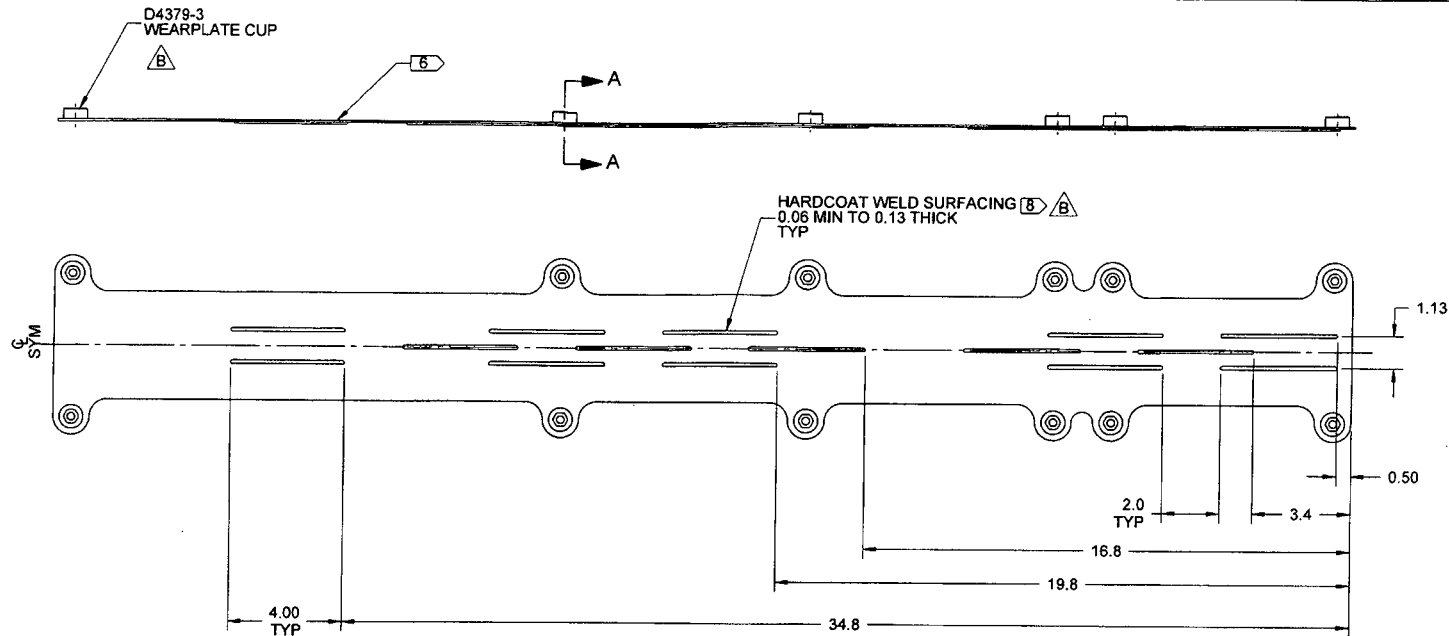
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

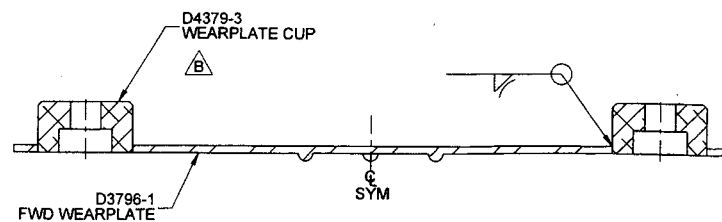
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QTY -041	P/N	DESCRIPTION
X	D3796-041	FWD WEARPLATE WELDMENT
1	D3796-1	FWD WEARPLATE
12	D4379-3	WEARPLATE CUP



D3796-041 FWD WEARPLATE WELDMENT

RELEASED
2012-08-10



SECTION A-A D5-2
SCALE 4X, TYP

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3796-041" AND B/N "BXXXXX" USING FINE POINT PERMANENT INK MARKER PER QSI 044
 - 7) WEIGHT: 4.00 lbs
 - 8) WELD PER DART QSI 004

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	<i>AP</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>AP</i>	D3796	SHEET 2 OF 4
APPROVED	<i>AP</i>	TITLE	SCALE
DE APPR.	<i>AP</i>	412 SKI WEARPLATE	NTS
DATE	12:07:04	COPYRIGHT © 2006 BY DART AEROSPACE LTD. THIS DOCUMENT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD. THIS DOCUMENT IS NOT TO BE USED FOR ANY PURPOSE OR FOR COMMUNICATION TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	

DQA: _____ Date: _____



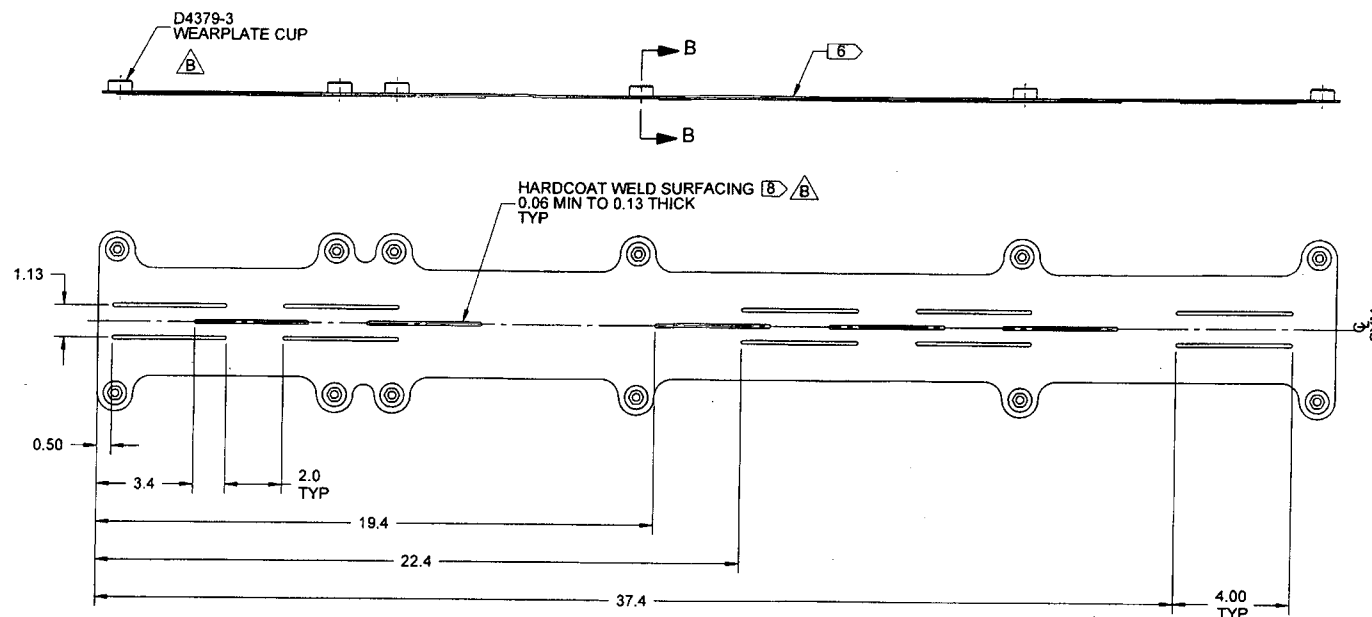
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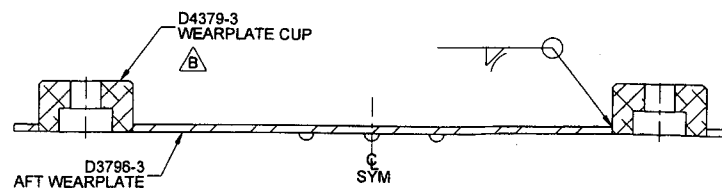
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐						

QTY -043	P/N	DESCRIPTION
X	D3796-043	AFT WEARPLATE WELDMENT
1	D3796-3	AFT WEARPLATE
12	D4379-3	WEARPLATE CUP



D3796-043 AFT WEARPLATE WELDMENT



**SECTION B-B D5-3
SCALE 4X, TYP**

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3796-043" AND B/N "BXXXXX" USING FINE POINT PERMANENT INK MARKER PER QSI 044
 - 7) WEIGHT: 3.86 lbs
 - 8) WELD PER DART QSI 004

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	AP	DRAWING NO.	REV. B
MFG. APPR.	AP	D3796	SHEET 3 OF 4
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	412 SKI WEARPLATE	NTS
DATE	12.07.04	COPYRIGHT © 2008 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR DISCLOSED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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2012-08-10

DQA: _____ Date: _____

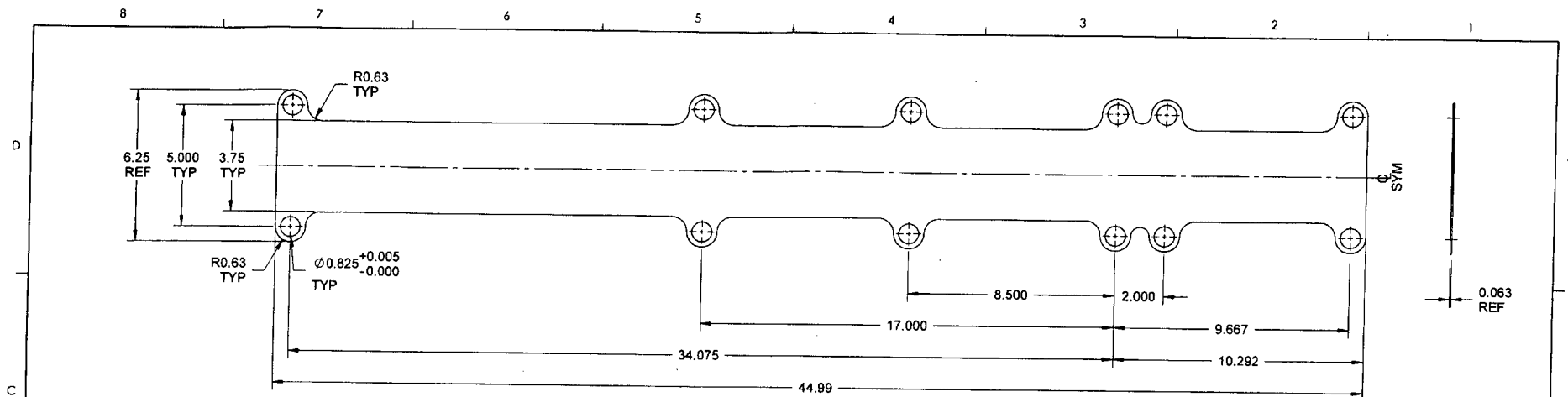


WORK ORDER NON-CONFORMANCE / UPDATE

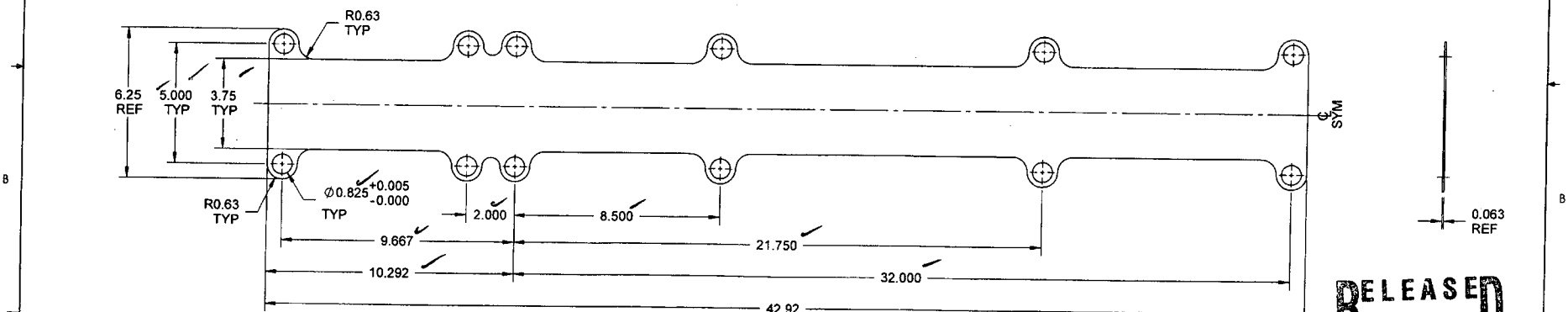
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
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Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
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Past Expiry Date ☐	Manufacturing Process ☐																								
Misidentified ☐	Past Due ☐	OTHER :																							



D3796-1 FWD WEARPLATE



D3796-3 AFT WEARPLATE

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, (ANNEALED) 2B FINISH, 16 GAUGE (0.063 THICK) PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240, REF. DART SPEC. M304S16GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3796-1 = 3.37 lbs
D3796-3 = 3.11 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	AP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. B
MFG. APPR.	AP	D3796	SHEET 4 OF 4
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	412 SKI WEARPLATE	NTS
DATE	12.07.04	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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